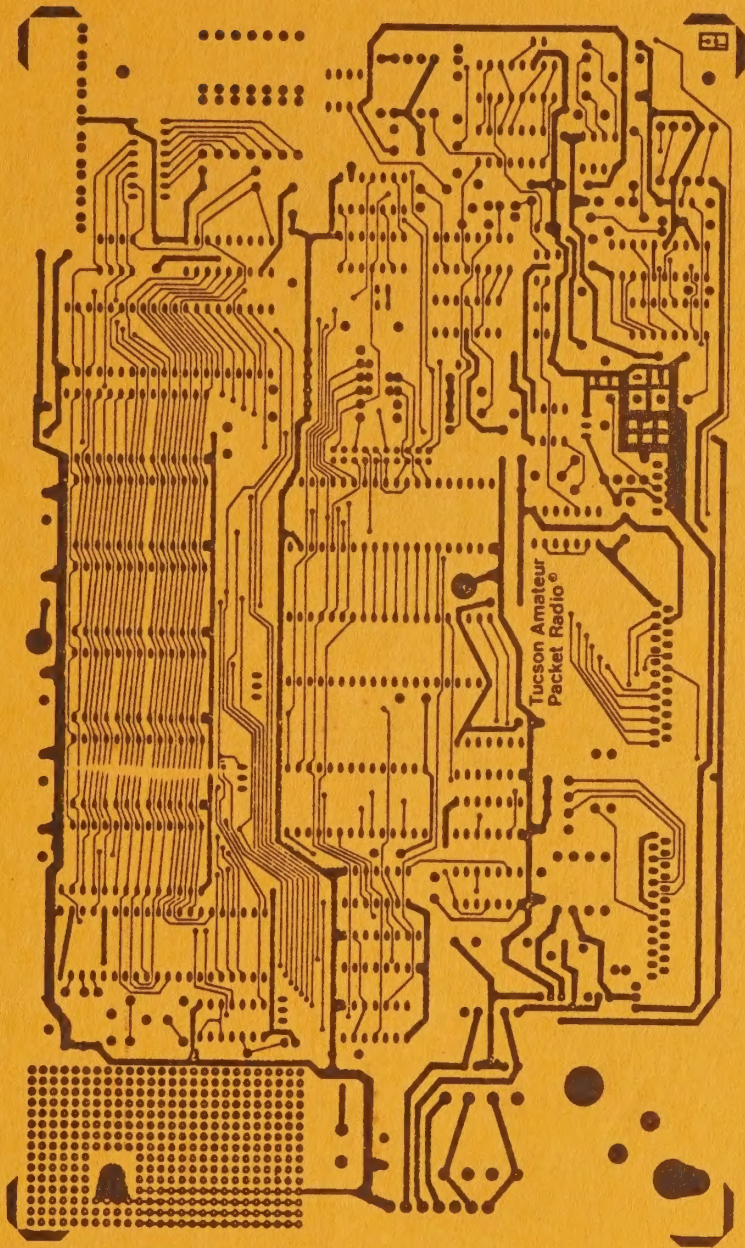


REDUCE TO 12.000 ±.005



The TNC Kit is Here!

*Thanks again
to Jeff!*

ANNEE MONDIALE DES
COMMUNICATIONS
WORLD COMMUNICATIONS
YEAR
AÑO MUNDIAL DE LAS
COMUNICACIONES



	CONTROL	
--	----------------	--

identifies the purpose of the packet

AFFILIATION

There has been much talk recently about making TAPR a national organization to which local clubs can affiliate. Members would then belong to both organizations with a single membership. It has been suggested that perhaps TAPR could be the acronym for The Amateur Packet Radio Club.

I think that there are a variety of advantages to such an arrangement. I, for one, would make my vote be a positive one. I hope that you will think it through and decide that you would like to do the same. There is much to be gained.

The first advantage that is obvious is that of coordination of efforts for the development of our special interest. Even without such coordination we have done a good job of working together. But more than six months after the adoption of a standard (AX.25) there are still several groups going off in their own directions. No one wants to stifle individual ingenuity. But organization can make it all fit together.

Another specific advantage of affiliation that has been mentioned regularly is that of the newsletter. All of us that are in the area of trying to provide information through the medium of the printed newsletter know how much help is needed in this area. There is a lot of duplication that has to take place in order to see that all get the latest. A great deal of time goes into putting information in the format of the local newsletter. I would guess that nearly all the editors would like to see something happen in this area. A national newsletter would be welcomed by all.

Such a newsletter should include regular

by-lines by a variety of persons who are best able to keep us up-to-date on the packet world. PACKET STATUS REGISTER has made an attempt to begin such a regularization. Areas of interest that need to be addressed in such a national newsletter might include: hardware, software, local area networking, linking, pacsat, hf packeteering, bulletin board design and management, club business and organization and you can think of a variety of other subjects to be covered.

I disagree that it is necessary to take into consideration the printing of strictly local items. Nor is it necessary that there be a special insert for mailing with the national newsletter. We are in th business of communications by electronics. All active members should be able to be kept up to date through the means that we attempt to develope.

I regret to announce that this will be the next to the last issue of SLAPR PROTOCOL that will come out under my editorship. There are too many pressing personal things at this particular moment and that makes it impossible for me to continue. I will be happy to work with the comming issue. In that way I will be able to round out the year as it will be the November/December issue for 1983. The new editor will then be able to begin with a clean slate for 1984. I have enjoyed trying to put our little newsletter together on a regular basis. I hope that it has been of help to a few. I can not take leave of SLAPR PROTOCOL without thanking you the reader for taking a few minutes every couple of months to join me through the written word. I also must say a very special thanks to three very special helpers. Without the help of Pete, WB9FLW and Bill, WD0ETZ and Scott, KA9AKM this special news sheet would never have gotten to you. Thanks fellows. See you all in November.

disconnect, W90FZ, Gus

TAPR AFFILIATION?

by KV7D

Proposal for Local-area Club Affiliations with TAPR

Introduction

There have been suggestions from Beta sites which have evolved into full-fledged clubs of possible affiliation arrangements with TAPR. A local organization has a lot to offer packeteers in the form of direct support. However, it needs to ask for dues in order to be able to do anything, and clubs are unwilling to require membership in TAPR of all their local members, in addition to asking for local dues.

Since local packet groups are typically fairly small, it is difficult for them to provide some of the features we associate with a ham club, principally a newsletter. The membership are likely to be primarily interested in getting their own boards, getting the boards working and figuring out how to deal with this new communications form, and getting the local packet repeater up. Manpower and club financing for anything else is likely to be low.

A formal affiliation arrangement for local-area packet radio clubs will require a change in TAPR's by-laws, and must be approved by the board of directors. This preliminary proposal is being sent to the directors, and also to the Beta coordinators for comment as representatives of potentially affiliated organizations.

Membership costs

At the current quantity level, the newsletter costs about 3¢ per side. This means that an 8-page newsletter (average size to date) costs 24¢ plus some overhead in preparation. Postage is 20¢ (we notice the P.O. is campaigning for a raise again). If the weight increases, postage will go up. We can send 5 and maybe 6 sheets for the 1-ounce rate. So the newsletter costs us about 50¢ per copy. Six issues per year cost us \$3 per member. Dues are \$12 which means that we are getting \$9 for R&D, paying old Beta debts, printing information packets for write-inners, paying accountants and lawyers, paying for the P.O. box, and whatever else is required to keep us alive. If other projects result in non-negative cash flow, we can presumably make do on less than this, with the difference being shared with suitable local groups.

Benefits of affiliation to local-area groups

The most important benefit to anybody who supports us is that packet radio gets development support, and presumably everyone interested in packet radio benefits if we accomplish something.

We put out a newsletter which so far has covered TAPR news, reports on meetings, and progress reports on Beta and post-Beta

designs for TNCs and software. There have been a few technical notes on the level of "here is a circuit that does something useful." This sort of material has presumably been of use at least to the Beta sites. Material which PSR could include which would be unlikely to appear elsewhere, either in QEX or in local newsletters, would be technical notes of a brief nature, such as descriptions of work-in-progress which would not normally justify a more formal article, or which might be expected to be of very limited interest. This might also include software descriptions of programs specifically applicable to packet radio, such as BBS programs, and listings of short programs or program segments.

Material which would be of direct interest to affiliated groups would be local-news columns. These could also serve as a way of groups keeping up with activities of the other areas. By publishing local news in a short column in PSR a small club might free itself of the obligation to publish its own newsletter, which might be largely padded with material from PSR or QEX or the AMRAD Newsletter.

In addition to the newsletter publication, TAPR could potentially benefit local groups by providing video-tapes (a new one would be much in order!) and show-and-tell props of other sorts. This might even extend to providing "loaner" TNCs for demonstrations to groups not in on any packet activity.

Benefits of affiliation to TAPR

Obviously we need more people involved in our projects if any of them are going anywhere. The best situation would be if we could arrange delegation of specific tasks, like "can you do the PSR this month" or "please look at this filter and see if there is any way it can be improved," to quote recent examples. We are all looking forward to getting a ground-linking system going, and we will need to distribute the work on this very widely if we expect to ever get it done. The delegation of tasks should not be to individuals, who frequently wind up being in Tucson, but to organizations, perhaps as an informal price for affiliation.

TAPR will find it easier to be a national packet information source if we can count on getting any pertinent information on local or regional (or foreign) activities in writing, in a timely manner.

Proposed affiliation arrangement

Clubs eligible for affiliation with TAPR as local-area groups should be packet radio groups or groups with packet radio as a major interest. The local character is important, but may be tricky to define. A local group would not normally cover more than one major metropolitan area, or a non-metropolitan area covering more than one state. The reason for being specific here is that the point of this arrangement is to provide a mutual relationship between a national group and local groups. An affiliation with AMRAD, for example, while possibly very desirable,

would have to be considered in a completely different category.

In order to be affiliated with TAPR, a local club would pay a yearly affiliated-club dues. In exchange for this dues, members of the club who either joined TAPR through the club or specified the club membership on their applications would entitle the club to a rebate of a fraction of the TAPR dues of the individual. The affiliated club would be entitled to a specific space allotment in PSR for local news. This would not preclude the club or members of the club writing more extensive articles on interesting topics for publication in PSR. In order to help limit this arrangement to local groups, the rebate might be limited to a certain number of applications per year. The affiliated club would also be entitled to subscribe to extra copies of PSR for its own distribution purposes.

At the time this measure becomes effective, local clubs would have a certain length of time to join TAPR as affiliated clubs. Any club joining during this period could provide TAPR with a list of club members who were already members of TAPR. The club would be entitled to a pro-rated rebate based on the unexpired membership period of these people.

Financial details

We are currently paying \$10-\$15 per side of PSR, depending on the number of copies run. If the space for club announcements were 1/4 page on the average, this would add about \$4 per issue to the printing costs. This statement obviously is meaningless if there is only one affiliated club, since the news always winds up in an integral number of pages -- we are assuming several such clubs. For six issues, we might spend \$20-\$24 more for PSR due to including the club news of each club. If contributions to club news are numerous, there will be a postage increase to figure into the estimate.

Based on these arguments, a suggested affiliation dues is \$35 per year. The individual rebate proposed is \$2, since TAPR would like to have about half of the dues available for R&D. The club would be entitled to up to 50 rebates. With 18 members, the club would come out even financially, and would possibly save itself the expense of a newsletter in addition. The club would be allowed to subscribe to extra copies of PSR at the rate of one copy for every two TAPR members in the club. The cost of the extra copies would be 40¢, to cover the cost of mailing them in bulk. The club would not be required to take all the copies it was entitled to, and the number requested would not have to be the same for each issue. The copies would have to be ordered in advance of printing, however.

Comments

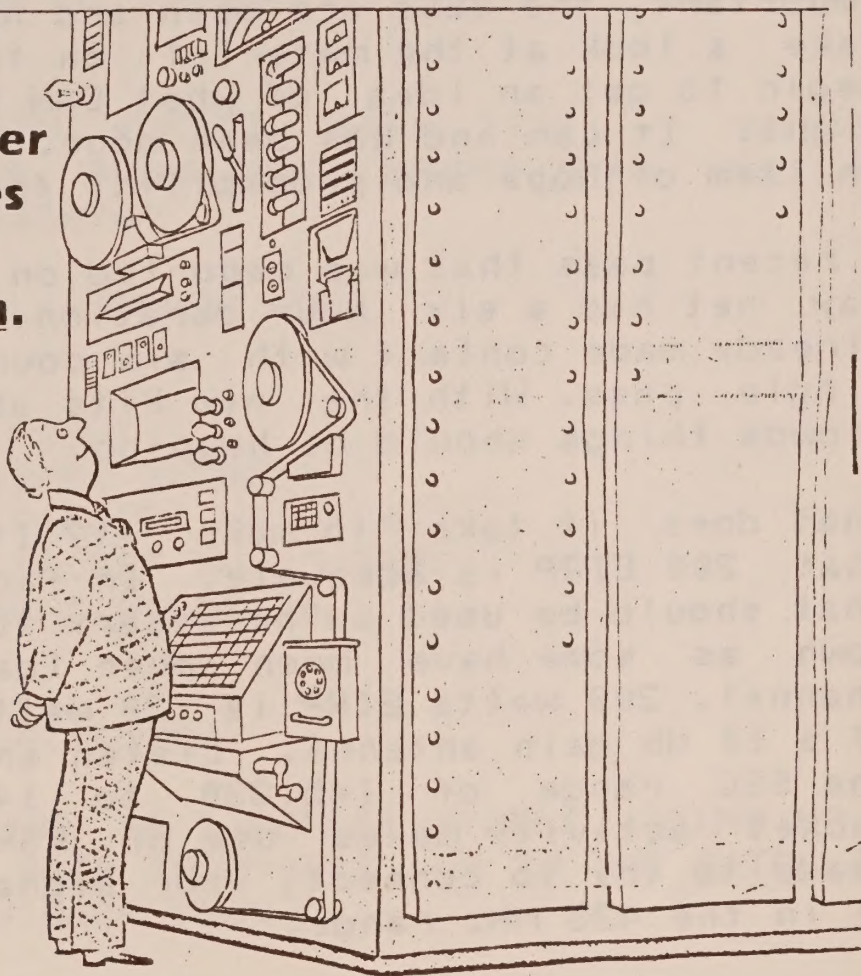
The suggestion of having clubs distribute newsletters was discarded. The savings in postage would be very small, since a single copy of PSR is almost an ounce. For large groups, mailing

third class would be cheaper, but with less reliable delivery. The final delivery would be delayed by two separate mailings or deliveries. The hassle to TAPR of special handling for these newsletters would more than compensate for any slight financial advantage.

The money estimates were based on the current PSR volume of 400 (with about 310 members at press time). If the membership increases very drastically, and the club-report feature is used, this may become expensive. In such an event, the club pages might go only to members of affiliated clubs.

Naturally, since this is a preliminary proposal, all the numbers are open to discussion. We need to hear from potential affiliated clubs whether the dues, rebates, and newsletter costs are such that they would find the proposal attractive. We also need to know whether the membership limitations are reasonable for large-population areas.

Finally. A Computer That Makes You Feel Like a Man.



If you've seen the popular new portable computers, you know their major drawback: they are so small. They do not look like computers. Where are the big dials and whirring, beeping things? Where are the spools of thick black tape that spin from side to side?

A Disk Drive You Can Drive.

Relax, Megadot is proud to introduce the Megadata 10,000,000 Macrocomputer, the first portable computer too big to be transported legally on many American roads. Employing the most cumbersome macrocircuitry available today, the Megadata 10,000,000 is the only portable computer built to withstand a direct nuclear strike. Five hundred mega-byte internal memory vault stores a universe of information, smelt's ore. And now's this for convenience: the Dynarobic fanfold tractor option is also a mini-helipad.

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The Megadata 10,000,000 is equipped with fully featured Touch-Tronic numeric keypad that boasts an individual key for every number from 1 to 1,000. One-stroke convenience eliminates costly calculation errors! Megadata's patented 11,872-key character board lets you compute in any alphabet currently known to man. Built-in

ink-jet printer accepts paper up to 40 feet across, 11 miles long. Special patented process lets you print on polished marble, too - without sticking or jamming! FCC-assured lambent radiation reduces the size of many simple tumors, gradually eliminates the need for sunglasses. Lead-impregnated testicle cup included with every purchase.

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**The Megadata 10,000,000
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that does not wonder if
you are a homosexual.**

**Can You Afford NOT To Own A
Computer That Costs \$1.1 Billion,
Shipping Not Included?**

MacroData

PACKET ON SATELITE

Well AMSAT OSCAR 10 is up and speaking to us all. Are you listening? I have been listening from time to time. Even with my less than adequate set-up I have been able to copy. Surely you ought to be able to get an ear on it too. But most important, the SSCs are open and have been in use. Take a look at the material on the next page and begin to get an idea of what CAN BE DONE. That's right. It can and has been done. It is no longer an item of hope and probability for the future.

A recent pass that was reported on the AMSAT Sunday net had a six hour duration. One station has already made contact with six countries all on a single pass. With the new kits about to hit the crowds things should be hopping.

What does it take to make it? It is suggested that 200 EIRP is adequate. In fact, no more than that should be used as necessary to keep the power down as some have been over loading its input channel. 200 watts EIRP is 20 watts at the input of a 10 db gain antenna. Listen should be done in the SSC range of 145.830 to 145.835. Present packet activity makes use of FSK. When you are ready to try to connect, your signal will have to be in the 435 MHz range.

Want some more information about how to get things going? Try one of the following nets.

Wednesday	0100 UTC	EAST COAST NET
Wednesday	0200 UTC	MID STATES NET
Wednesday	0300 UTC	WEST COAST NET
Sunday	1800 UTC	INTERNATIONAL NET
Sunday	1900 UTC	INTERNATIONAL NET

Special Service Channels H2 (SSB) and L1 (CW/RTTY) will also carry operating information.

disconnect, W9DFZ, Gus

PACKET ON OSCAR 10 de W3IWI

TONITE WAS A REMARKABLE NITE -- MULTIPLE TWO-WAY
PACKET RADIO TESTS WERE DONE BY W3IWI, NK6K,
ZLIAOX ALONG WITH KA9Q AND WA2LQQ AS SPECTATORS.
WE USED 1200 BAUD (AND TRIED 600 BAUD) FSK ON
AMICON (L1) CHANNEL AROUND 145.830-835 DOWNLINK.
THE FOLLOWING IS EDITED DOWN TO SHOW SOME OF THE
TRAFFIC COPIED AT W3IWI:

FIRST, I SET UP MY BEACON TO TRANSMIT THE FOLLOW-
ING MESSAGE:

W3IWI>BEACON:W3IWI PACKET RADIO TEST -- ANYBODY
COPY? THE QUICK BROWN FOX JUMPED OVER THE LAZY
DOG'S BACK 0123456789

THEN I REPEATEDLY CALLED CQ:

W3IWI>CQ:
W3IWI>CQ:CQ DE W3IWI
W3IWI>CQ:IS ANYBODY THERE??
W3IWI>CQ:HELLO PACKETS DE W3IWI
W3IWI>CQ:W3IWI PACKET RADIO TEST
W3IWI>CQ:VIA AMSAT OSCAR-10
W3IWI>CQ:
W3IWI>CQ:
W3IWI>CQ: (ETCETERA)

NOBODY WAS AROUND, SO I WORKED MYSELF, GOING UP TO
THE SATELLITE, BACK TO MYSELF, UP TO THE SATELLITE
AGAIN, AND THEN BACK DOWN:

CMD:C W3IWI VIA W3IWI
CMD:*** CONNECTED TO W3IWI
*** CONNECTED TO W3IWI
TEST
TEST

NOW IS THE TIME FOR ALL GOOD MEN TO COME AND HAVE
A PARTY
NOW IS THE TIME FOR ALL GOOD MEN TO COME AND HAVE
A PARTY
CMD:D
CMD:***DISCONNECTED

THEN, AFTER A LONG TIME OF SENDING TO MYSELF WITH

KA9Q SPECTATING, ZL1AOX SHOWED UP (HE USED CAP'S,
I USED LOWER CASE):

CMD:C ZL1AOX

CMD:*** CONNECTED TO ZL1AOX

hi ian -- how copy

OK I HAVE A CONNECT MSG TOM
only occasionally

OK, WELL I SEEM TO COPY U FB

did u rx my ack?

YEP

hi harold

(NK6K CALLED IN ON FREQ)

OK

RGR TOM IT'S NOT AS WELL AS IT SHOULD DOWN HERE

CMD:D

C NK6K

CMD:*** CONNECTED TO NK6K

hi harold

HELLO TOM

seems pretty gud copy

LOKS GREAT

Welcome to the wonderful world of packet radio !!!

YEP. AM SURPRISED,

1200 baud too

MEBEE WE SHOULD TRY 600

hot stuff!

ETCETERA

THEN WE TRIED A REAL FIRST: I CONNECTED WITH
MYSELF, THRU AD-10 TO NK6K, WHO DIGIPEATED MY
PACKETS BACK TO ME:

C W3IWI VIA NK6K

CMD:*** CONNECTED TO W3IWI

TALK ABT DUMB THING TO DO

TALK ABT DUMB THING TO DO

CMD:D

CMD:***DISCONNECTED

C NK6K

CMD:*** CONNECTED TO NK6K

DID U SEE WHAT I DID??

COPIED 100%!!

THEN WE TRIED MORE EXPERIMENTS AS NK6K AND ZL1AOX
TRIED TO RUN MY COMPUTER REMOTELY. THE ONLY

QUESTION REMAINING -- WHERE ARE ALL THE OTHER
PACKETEERS -- THE AO-10 AMICON CHANNEL IS NOW
OFFICIALLY CHRISTENED AND OPERATING WELL. WHO WILL
BE THE NEXT TO JOIN US?

TOM (W3IWI)

THE ABOVE WAS INTENDED FOR TRANSMISSION AUG 22,
WHEN I POSTED IT ON TELEMAL, BUT IT HAS BEEN A
BUSY WEEK AND I HADN'T HAD TIME TO LOG ON HERE.
THE FOLLOWING NITE, KA6M REPORTED HEARING AND
RECEIVING MY BEACON, BUT NOBODY SHOWED UP. SINCE
THEN, IT HAS BEEN RATHER QUIET, BUT IT WORKS.

FOR INFO, I FOUND THAT I HAD MUCH BETTER LUCK
BYPASSING THE EXAR DEMODULATOR AND USING MY
VENERABLE OLD GENERAL DATACOMM 202 UNIT -- THE ONE
I HAD USED FOR BOTH UOSAT AND WITH MY VADG BOARD.
IN A NOISY ENVIRONMENT, IT SEEMS THAT THE BANDPASS
FILTER/SLICER DEVICES ARE ABOUT 5-10 DB BETTER
THAN THE PLL DEVICES. PUTTING THE EXTERNAL MODEM
ONLINE WAS EASY -- PULLED OUT THE EXAR CHIP (U18)
AND DID AN RS232 ==> TTL LEVEL TRANSITION WITH
OPEN-COLLECTOR TRANSISTORS ON A DIP HEADER THAT
PLUGGED INTO THE U18 SLOT. CAN PROVIDE DETAILS TO
ANYONE INTERESTED IN TRYING A SIMILAR IDEA. NEXT
STEP WILL BE TO TRY PSK USING THE PHASE-3 PSK TLM
DEMODULATOR BOARDS.

AGAIN -- WHERE IS EVERYONE ELSE????

Tom

.....

ORBIT AND AMSAT OSCAR 10

If the above material from W3IWI gives you the
itch to take a look at the possibilities of AO-10
and packet radio, then take a good look at ORBIT
No. 14 for May and June, 1983. Between its covers
are articles of the first days of Oscar 10, track-
ing Phase III satellites, AO-10 ground station an-
alysis and an up-date on the AMS-81 automatic
tracking project. Good reading and lots of it!
Comes with AMSAT membership - \$24.00 per year.
Write AMSAT, Box 27, Washington, D. C. 20044

BCC: info copy

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July 21, 1983

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Dr. G. Stewart Beal, VE3MWM
2391 Arnold Crescent
Burlington, Ontario
CANADA L79 4J2

Dear Stewart:

A brief update on the packet progress of us gringos 'south of the border' in western New York state. Trust you received the copy of Volume 1, 'Packet Radio Using the Software Approach' that I sent you last month? If not, I would be pleased to send the 'father of packet radio' another one. Since you are the father, possibly Doug Lockhart is the 'mother.'

On the 4th of July (a most appropriate day), I finished the AX.25 protocol program for Volume 2. It is head and shoulders above and beyond Volume 1's rather Mickey Mouse program in that it converts, zero deletes, and stores the received SDLC bytes in memory in ASCII/decimal format in real-time. This marvelous speed-up was through the kindness and assistance of Gilbert Boelke-W2EUP who is a real programming genius.

Another interesting facet of Volume 2 is that the user may specify any number of frames per packet with frames of ANY length desired and the program automatically formats and transmits them as ordered. Normally the AX.25 maximum info field length of 256 bytes per frame and SDLC maximum of 7 frames per packet is used, but it is NICE to be able to set these parameters as desired (just press a key). Following AX.25, the program will format frames/packets either through a repeater or direct, as desired. Whereas Volume 1 required manual (press space bar) resending of unacknowledged packets, Volume 2 is entirely automatic and allows the user to specify the number of retries to ad infinitum - ad nauseum.

Probably the biggest break-through in Volume 2's software program is the 'speed' which my new FCS/CRC subroutine calculates the CRC value. With a 4 MHz clock, it works out to approximately 40 microseconds per byte, more than an order of magnitude faster than my crude Volume 1 subroutine. Crude nevertheless, but it worked.

This breakthrough was due entirely to an excellent paper in the June '83 issue of 'IEEE Micro' magazine by Aram Perez: 'Byte-wise CRC Calculation,' pp 40 - 50. With lotsa luck I managed to convert his CRC16 - $X[16+X[15+X[2+1]$ generator polynomial program to the appropos SDLC (IBM, CCITT) generator polynomial program using $X[16+X[12+X[5+1]$.

Boy oh boy, it is F-A-S-T. So fast that I can do the CRC checking in the receive mode in real-time, or conversely, after the packet is received with virtually no significant time penalty whatsoever. This break-through has removed the LAST objectionable feature of my software approach versus the hardware approach at 1200 and 2400 Baud.

For higher Baud rates, the new Z-800 microprocessor with its 10 MHz to 25 MHz clock will allow the software approach to compete very well with the hardware approach at 4800 and 9600 Baud rates. I personally do not foresee any higher Baud rates than 9600 used on the amateur bands in our lifetime except possibly with satellites.

My good friend and neighbor, Gilbert Boelke-W2EUP in West Seneca, NY has completed his own software routine for the Vancouver protocol that fits into a single 2732 EPROM. He is now starting on the AX.25 protocol and will shoe-horn both the Vancouver and AX.25 protocols into a single 2764 EPROM. No expensive dedicated SDLC chips are required.

The PCB includes a Z-80 so the system will work with most any variety of output device from a stand-alone RTTY machine to a cheap microcomputer such as a VIC-20 or Sinclair.

Gil's brilliant approach promises a very low entry cost into Packet Radio for the newcomer and will be a real winner, I predict. Three prototype/production boards have been completed by GLB Electronics in Buffalo and exhaustively tested by W2EUP, K2IMP, and WB2VEU.

Well now, so much for the western New York progress report. Let me hear how things in the Hamilton/Toronto area are progressing. I can copy your packet repeater about 25 miles northeast of Toronto at Stouffville, Ontario when ground wave conditions are 'right' but it is indeed a long haul from Chautauqua Lake on the New York/Pennsylvania border.

I suspect Doug Lockhart has long since completed his monumental effort in reprogramming the Vancouver board's EPROM to work AX.25? Actually, it should be quite easy to accomplish since the Intel 8273 SDLC chip does all the truly hard work. Programmers with your vast experience and knowhow should have little difficulty adapting it to their own favorite brand of microcomputer or video terminal.

I am circulating copies of this letter to a number of packet friends in the U.S. and abroad to bring them too, up to date on local packet news and activity.

Best wishes and 73,



Robert M. Richardson, W4UCH

	GATEWAY	
--	---------	--

station to access long distance communications

PACKET ON JAMSAT

ORBIT # 14 reports that JAMSAT expects to put in orbit an AO-7 type satellite with a PACSAT-type digital transponder during 1986. JAS-1, as it will be known, will be placed in an 1500km circular orbit like that of AO-7. It is expected to have an inclination of 50 degrees. In addition to the digital transponder, it is planned to have a mode J-type linear transponder on board.

Keep your eyes to the sky.

Information from ORBIT # 14, May/June, p. 31

.....

CAREN'S PRBBS IS UP AND RUNNING

The Central Arkansas Radio Emergency Net has announced that a Packet Radio Bulletin Board System is up and running in Little Rock. It operates through the 147.90/147.30 repeater. The bulletin board operates on the "Big Board" computer system belonging to the club's president, W5FD. All of the other local packet group (KC5JH, K4GXV, W5PYZ, WB5FDP) have used the system with excellent results. There remain some bugs to be worked out. The system at present does not allow the users to access the computer system fully nor get access to the CP/M operating system but adaptations of the existing program are in process by KC5JH. (SLAPR members should be familiar with the system as it is a modification of WD0ETZ's original system.)

Courtesy of CAREN'S WORLD, the Caren newsletter

WISCONSIN CONNECTS TO CHICAGO

Dennis, WB9SUM, was a visitor in the St. Louis area a couple of weeks ago. It seems that some of the Wisconsin fellows had been having problems getting their TNCs to work. When put to the test here is the St. Louis area, they worked as "advertised." Problem? That's right. Low line voltage.

It seems that Dennis went right home, that is after his boss said that his work assignment in this area was finished, corrected the culprit and connected on the first try with Chicago. That is approximately 50 miles airline from Racine, Wisconsin, the home of WB9SUM.

Good show, Dennis, good show.

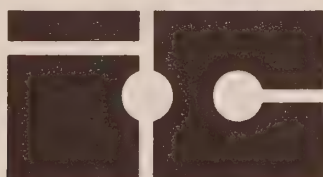
.....

CONGRATULATIONS NEPRA

We understand that the New England Packet Radio Association is off and running. CONGRATULATIONS to the people of the greater Boston area. A special word of congratulations to Den Connors, KD2S, who we understand was a spark plug to get things going. We expect great things from NEPRA and all of the poeple of New England.

.....

MANY THANKS AGAIN TO JEFF ERVIN
ANOTHER FINE JOB WELL DONE



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Jeff Eirvin

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SLAPR BOARD II

Yes, you can now connect to SLAPR BOARD II! We again have a bulletin board system active in the St. Louis area on 147.555!! We will try to give you 24hr. service, or as close as we can manage. With no question, the board should be available from 11pm to 5pm the next day. The most questionable time will be between 5pm and 11pm, when there is a chance the computer will be in use for other purposes here. If you connect to us, and do not get the bulletin board, just try again later. The system does 'beacon' messages every quarter hour when it is available. If you are in normal monitor mode, you should see them as unprotocalled packets with a to address of 'MAILBX'. Just a reminder, we are located in Edwardsville, IL, and you will have to adjust your antennas accordingly. If you can't reach us direct, we have found that digipeating through Tom, WA0KGU seems to work well. (Thanks for being available Tom!) The bulletin board software was written by Lynn Taylor, WB6UUT, in Apple Pascal. Lynn has kindly given us a copy for our local use. We have been working with him for a couple of weeks to correct a few problems in the hardware to software interfacing. The bulletin board is running on our Apple II plus with the Mountain Computer CPS Multifunction card. The system will also run on Apple with the CCS/Thunderclock configuration. At the time, the system does require two disk drives. Here is a small summary of the list of commands that Lynn has provided for us:

Logging on:

Symply connect to the BBS station (KA9AKM) in converse mode. If you are a current user, you will be automatically recognized, the News headline will be displayed, and any messages for you will be noted before the command line is given.

Receiving Mail:

Typing R<return> will display the headers of all messages addressed to you. Typing the serial number of a message while the headers are being listed, will display that message, and then continue listing the headers.

Browsing Mail:

Typing B<return> will display the headers of every message in the system. Messages may be read in the same manner as when receiving mail.

Sending Mail:

Just select S<return> and you will be asked for the callsign of the desired station. Then enter your message. Type '***end' on a separate line to end the message. Maximum message length is 50 lines.

Calling the System Operator:

Selecting C<return> will alert the system operator (SysOp) that you wish to talk to him. Continue using the mailbox, and if the SysOp is in, he will break in after you complete a command.

Logging off:

To log off, just disconnect normally.

Line Length:

Just remember that the lines you send to the bulletin board can not be longer than 78 characters.

More detailed information is available on the bulletin board in the (H)elp file. Lynn is continually improving the software, so there will probably be more commands coming in the future. I would like to thank Lynn for taking the time to write this system from scratch, and for all his cooperation and help. We hope to see you soon on: SLAPR BOARD II.

NEW VIDEO-TAPE AVAILABLE

Howdy packeteers,

A video-tape lecture entitled "INTRODUCTION TO PACKET RADIO" is now ready for distribution. This discussion features WB9FLW, Peter Eaton, and was taped during Pete's presentation to the CENTRAL IOWA TECHNICAL SOCIETY on July 23, 1983. It covers digital packet concepts, packet radio local area network (LAN) operations and the Tuscon Amateur Packet Radio (TAPR) terminal node controller (TNC).

Pete's long term experience with the TAPR TNC project and his service as President and co-founder of the St. Louis Area Packet Radio club gives him an especially solid foundation for this lecture. Groups interested in packet radio but which have not had the advantage of such a personal presentation will find their time and money well spent when they present this video-tape to their members.

Commercial audio and video equipment and methods were used for production and in post-production preparation of this video-tape. It is one-hour long and available in either VHS or BETA format.

Please send \$25, which covers the cost of the tape and first-class postage, to:

CENTRAL IOWA TECHNICAL SOCIETY
c/o Ralph Wallio, W0RPK - President
Rural Route Four
Indianola, Iowa 50125
515-961-6406

Any proceeds will be used to partially cover expenses associated with the development of METEOR SCATTER digital communications for packet radio inter-LAN trunking.

73, Ralph

	LAN	
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COMMENTARY/REVIEW

One of the things that has disturbed me over the months is the lack of organized developemnt of a local area net. Pete has already mentioned the general lack of enthusiasm found at the hamfests this year. That is very much in evidence on 147.555 as well.

I've also heard the excuse that "I wouldn't know what or how to get at it." Folks, that is no longer a valid excuse. Pete has found a review of "THE LOCAL NETWORK HANDBOOK." It is billed as "Everything you ever wanted to know about local networks, but were too ill-informed to ask."

THE LOCAL NETWORK HANDBOOK is edited by George R. Davis. Mr. Davis is the editor-in-chief of Data Communications. The book is a series of articles that deal with all areas of local networking. Mr. Davis' book is the seventh in the Data Communications' book series.

There are 32 individual articles in the book. They are divided into six sections. Technology, software, equipment, implementation, applications, and network selection are the content sections. Three to eight articles are contained in each of these sections.

The review, written by Earle Holland, says, "While the book does contain an abundance of complicated charts and graphs, flow diagrams and and heavy doses of computer jargon, it also contains a handful of introductory articles on subjects like computer security, data transmission devices and how networks work."

OK folks. There you are. Get your questions answered and get hooked up.

W90FZ, Gus

MOBILE PACKET???

This last weekend I had the opportunity to attend the S.W. ARRL Convention and help man the Packet Booth. The southern California hams have not been sitting still.

During my visit I was able to use Mike Brock's (WB6HHV) mobile packet system! Yep folks, that's what I said, "mobile packet system." Mike has his TAPR board in the Ford Pinto. By using a TRS-100 I was able to access the local portable Packet BBS system. Yep, you read right again. The local boys put a complete packet station and BBS in my room on the 8th floor of the hotel.

It's designer is Lynn Taylor, WB6UUT. The system consists of an Apple //e and two drives. As Mike and I drove around the Anaheim area I was able to access and "play" with Lynn's Apple back in the hotel. Now gang if that doesn't get your attention, I'm not sure what will.

Oh yes, we also used the "Pinto Packet" system as a digital repeater to connect down into San Diego. The repeater was in motion coming up Interstate 5 !

Pete, WB9FLW

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1983 SLAPR ROSTER CONTINUED

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FMCALL

ST LOUIS PACKET RADIO CLUB

SLAPR PROTOCOL

The St. Louis Packet Radio Club is comprised of individuals interested in digital communications, especially via radio waves. Its main purpose is to stimulate the development and use of digital radio communication systems and to provide a forum for the exchange of ideas about the same.

The officers for 1983 include:

President

WB9FLW Pere Eaton

Vice-president

KOPFX Mel Whitten

Secretary/treasurer

KAOAYO Ed Dillon

SLAPR PROTOCOL Editor

W90FZ Gus Kuether

SLAPR meets the last Monday of January, March, May, July, September, and November in the Grand Teton Room at Deaconess Hospital at US40 and Hampton Avenue. All are welcome to join the activities fun.

SLAPR PROTOCOL is the official news letter of the St Louis Area Packet Radio Club. It is published six times a year. It is available by subscription at \$10.00 a year, which is inseperable from SLAPR membership.

The purpose of SLAPR PROTOCOL is to disseminate information about the state of the art in Packet Radio related activities. All interested individuals are invited to participate in two ways. The reader is free to make the information contained in this newsletter known as widely as possible. It is only asked that credit be given to the author and to SLAPR PROTOCOL. In the second place, the reader is invited and encouraged to contribute material for the betterment of Packet Radio. Address correspondence to:

SLAPR PROTOCOL
1309 Gloucester Dr.
Edwardsville, IL 62025

SSSSS L A PPPP RRRR
S L A A P P R R
SSSSS L AAAAA PPPP RRRR
S L A A P R R
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SLAPR

St. Louis Area
Packet Radio Club



ST. LOUIS AREA PACKET RADIO CLUB

Membership Application/Renewal (Membership is based on calendar year.)

Mail to: Ed Dillon, Secretary/Treasurer Dues: (includes PROTOCOL)\$12/yr
14942 Country Ridge 2nd member in one family \$ 2/yr
Chesterfield, MO 63017 Make checks payable to SLAPR.

Name _____

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I support the purposes of
SLAPR.

FLAG

identifies the beginning or the end of a packet

Well the Hamfest season is about over and Packet Radio has been on the road almost every weekend. In general its been fun but something bugs me. Why is there so much negativism out there? Common comments were that "the hobby is going down the tubes", or "can't do that", or "its too complicated". But the one I liked the best was "I have about as much interest in Packet as I do submarines" (p.s. the guy didn't like submarines either) sigh!!! Well I guess you will always run into folks like that but there is so much of it! If the poor folks dislike the hobby so much, why come to the hamfest, let alone the forums.

Interestingly the group that really grabs the packet idea with enthusiasm is the computer group, both clubs and magazines. A small piece on Packet and TAPR appeared in a recent issue of Popular Computing. Lyle Johnson, president of TAPR, said that one article has produced more mail than anything else we have attempted to do to "get the word out." Are we barking up the wrong tree so to speak? Lots of hams evidently don't see any big deal in Packet but the non-ham computer hobbists are really excited....

Well the TAPR TNC kit artwork is done. Jeff Eirvin of Ol' Interconnections, who did the Beta board, has done us proud again. Over 70 hours were put into the layout. It IS a work of art!

Many of you know Lyle Johnson was in St Louis the first weekend in August to oversee the final drafting of the board. We don't think we forgot anything, but... Before catching his plane to Tucson, I took Lyle up in the Arch. The President of TAPR was a bit reluctant to leave mother earth and take the tram to the top, but he finally succumbed. I think he was impressed. (It would make a grand Packet repeater location)!

There has been a lot of debate about a new Packet Bulletin Board System. With the help of Lynn Taylor, WB6UTT, of the West Coast the Kuethers, Scott and Gus, are trying to implement a Packet BBS that Lynn designed on an Apple II. So hopefully this Fall you'll have something to connect to. What plans do you have for your packet station this Winter?

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SEPTEMBER MEETING

SEPTEMBER 26

Mr. Tom Berryhill, AB0Q, will be the guest speaker for the September meeting. His subject will be the making of double-sided, plated-through circuit boards. Tom is particularly able to talk on this subject as he is President of Ditek Industries, Inc. Tom also made three prototype circuit boards for the kits. One of the boards will be available for you viewing. Welcome Tom.

A second item of interest for the meeting will be the discussion of setting up a permanent digipeater for the St. Louis area. The cooperation of all is needed to make it happen. There are rumors that a site has been offered. Another rumor says that a two meter rig has already been donated. Another rumor that is seen on local screens says that there is a computer available, but it needs programming? If you are the subject of one or more of these rumors, you better be present to defend yourself lest we take the rumor seriously and expect you to come through.

The third item for the September meeting is an up-date on the bulletin board system. Parameters, operating techniques as well as scheduling will be determined.

SEPTEMBER 26-GRAND TETON ROOM -DEACONESS HOSPITAL

A CLUB IS NOT A CLUB WITHOUT YOU!

SLAPR PROTOCOL
ST. LOUIS AREA PACKET RADIO CLUB
1309 GLOUCESTER DR.
EDWARDSVILLE, IL 62025

*
* DOUBLE SIDED PC BOARD *
* HOW TO MAKE 'EM *
* BY TOM, AB0Q *
*

NEXT SLAPR MEETING
MAKING OF DOUBLE SIDED PC BOARDS
BY TOM BERRYHILL, AB0Q
7:30 PM ON SEPTEMBER 26, 1983
GRAND TETON ROOM, 7TH FLOOR
DEACONESS HOSPITAL
6150 OAKLAND, 40 AT HAMPTON
ACROSS FROM FOREST PARK
ST. LOUIS, MO

KA6M
HANK MAGNUSKI
311 STANFORD AVE
MENLO PARK, CA 94025



Robert Millikan

